

SYMBOL LEGEND	
SYMBOL	DESCRIPTION
REFERENCE AND LINE SYMBOLS	
	DETAIL INDICATOR: A5 INDICATES DETAIL NUMBER, E-501 INDICATES DRAWING SHEET WHERE DETAIL IS SHOWN.
	ELEVATION OR SECTION INDICATOR, EXTERIOR: A5 INDICATES ELEVATION OR SECTION NUMBER, E-201 INDICATES DRAWING SHEET WHERE ELEVATION OR SECTION IS SHOWN.
	KEYNOTE INDICATOR.
	REVISION INDICATOR.
	BREAK, ROUND.
	BREAK, STRAIGHT: TO BREAK PARTS OF DRAWING.
WIRING METHODS	
	WIRING.
	WIRING TURNED UP OR TOWARDS OBSERVER.
	WIRING TURNED DOWN OR AWAY FROM OBSERVER.
	BRANCH CIRCUIT HOME RUN TO PANELBOARD: NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS. LETTER AND NUMBER NOTATIONS IDENTIFY PANEL AND CIRCUIT NUMBERS. USE #12 CONDUCTORS, EXCEPT #10 CONDUCTORS SHALL BE INSTALLED IF DISTANCES EXCEED THOSE SPECIFIED IN SECTION 16120.
	BRANCH CIRCUIT HOME RUN TO PANELBOARD: NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS. LETTER AND NUMBER NOTATIONS IDENTIFY PANEL AND CIRCUIT NUMBERS. NUMBER IN BOX REFERS TO THE CONDUCTOR AND CONDUIT SCHEDULE. FOR BRANCH WIRING USE #12 CONDUCTORS, EXCEPT #10 CONDUCTORS SHALL BE INSTALLED IF DISTANCES EXCEED THOSE SPECIFIED IN SECTION 16120.
	BRANCH CIRCUIT HOME RUN TO PANELBOARD: NUMBER OF ARROWS INDICATES NUMBER OF CIRCUITS. LETTER AND NUMBER NOTATIONS IDENTIFY PANEL AND CIRCUIT NUMBERS. SMALL CROSS LINES INDICATE NUMBER OF CONDUCTORS OR CABLES. LARGER CROSS LINE INDICATES EQUIPMENT GROUND. WAVY CROSS LINE INDICATES INSULATED/ ISOLATED GROUND. FOR BRANCH WIRING, CROSS LINES INDICATE #12 CONDUCTORS, EXCEPT #10 CONDUCTORS SHALL BE INSTALLED IF DISTANCES EXCEED THOSE SPECIFIED IN SECTION 16120.
	CONDUIT STUB. DIMENSION RECORD DRAWINGS AND MARK.
	CONDUCTOR & CONDUIT ("CC") SCHEDULE INDICATOR. REFER TO ONE-LINE DIAGRAM.
	CONDUCTOR RUN IDENTIFICATION.
	JUNCTION BOX.
	PULL BOX.
	EARTH GROUND (ONE-LINE DIAGRAM).
SITE ELECTRICAL AND COMMUNICATIONS UTILITIES	
	HAND HOLE.
	TRANSFORMER.
ELECTRICAL POWER AND DISTRIBUTION	
	PANELBOARD WITH MAIN CIRCUIT BREAKER. SIZE AND PHASE AS SHOWN (ONE-LINE DIAGRAM).
	TRANSFORMER (ONE-LINE DIAGRAM).
LIGHTING CONTROL	
	PHOTOCELL.


ABBREVIATIONS			
NOTE: ALL ABBREVIATIONS MAY NOT BE USED.			
1P	SINGLE POLE	KV	KILOVOLT
1PH	SINGLE-PHASE	KVA	KILOVOLT AMPERE
2/C	ONE-WAY	KVAR	KILOVOLT AMPERE REACTIVE
2WAY	TWO-CONDUCTOR	KW	KILOWATT
3/C	THREE-CONDUCTOR	KWH	KILOWATT HOUR
3PH	THREE-PHASE	LED	LIGHT EMITTING DIODE
3WAY	THREE-WAY	LFCM	LIQUID TIGHT FLEXIBLE METAL CONDUIT
4OUT	QUADRUPLE RECEPTACLE OUTLET	LFCN	LIQUID TIGHT FLEXIBLE NONMETALLIC CONDUIT
4PDT	FOUR-POLE DOUBLE THROW	LPS	LOW PRESSURE SODIUM
4PST	FOUR-POLE SINGLE THROW	LRA	LOCKED ROTOR AMPS
4W	FOUR-WIRE	LV	LOW VOLTAGE
4WAY	FOUR-WAY	LVT	LOW VOLTAGE TRANSFORMER
A	ABOVE COUNTER	LVA	LOW VOLTAGE ANTENNA
ADA	ARMORED CABLE	MAX	MAXIMUM
ADA	AMERICANS WITH DISABILITIES ACT	MCA	MINIMUM CIRCUIT AMPS
ADJ	ADJACENT	MCB	MAIN CIRCUIT BREAKER
AFF	ABOVE FINISHED FLOOR	MCC	MOTOR CONTROL CENTER
AFC	ABOVE FINISHED GRADE	MCP	MOTOR CIRCUIT PROTECTION
AIC	AMPERE INTERRUPTING CAPACITY	MDP	MAIN DISTRIBUTION
ALUM	ALUMINUM	MIN	MINIMUM
AMP	AMPERE	MG	MOTOR GENERATOR
ANN	ANNUNCIATOR	MH	MANHOLE
AP	ACCESS POINT (WIRELESS DATA)	MIN	MINIMUM
AR	AS REQUIRED	MLO	MAIN LUGS ONLY
AS	AMPS SHORT CIRCUIT	MOCP	MAXIMUM OVERCURRENT PROTECTION
ATS	AUTOMATIC TRANSFER SWITCH	NA	NOT APPLICABLE
AV	AUDIO VISUAL	NC	NORMALLY CLOSED
AWG	AMERICAN WIRE GAGE	NEC	NATIONAL ELECTRICAL CODE
BB XFMR	BUCK-BOOST TRANSFORMER	NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION
C	COMMUNITY ANTENNA TELEVISION	NFC	NATIONAL FIRE CODE
CB	CIRCUIT BREAKER	NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
CCBA	CUSTOM COLOR AS SELECTED BY ARCHITECT	NIC	NOT IN CONTRACT
CCTV	CLOSED CIRCUIT TELEVISION	NL	NIGHT LIGHT
CCTV	CUSTOM FINISH AS SELECTED BY ARCHITECT	NO	NORMALLY OPEN
CFBA	CONTRACTOR FURNISHED/CONTRACTOR INSTALLED	NTS	NOT TO SCALE
CF/CI	CONTRACTOR FURNISHED/CONTRACTOR INSTALLED	OC	ON CENTER
CF/OI	CONTRACTOR FURNISHED/CONTRACTOR INSTALLED	OC	OVER CURRENT
CKT	CIRCUIT	OF/CI	OWNER FURNISHED/CONTRACTOR INSTALLED
CM	CONSTRUCTION MANAGER	OF/OI	OWNER FURNISHED/CONTRACTOR INSTALLED
CND	CONDUIT	OF/PH	OWNER FURNISHED/CONTRACTOR INSTALLED
CO	CONVENIENCE OUTLET	OH DR	OVERHEAD (COILING)
COR	CONTRACTING OFFICER'S REPRESENTATIVE	OL	OVERLOAD
CP	CONTROL PANEL	PE	PUSHBUTTON
CT	CURRENT TRANSFORMER	PF	POWER FACTOR
CTV	CABLE TELEVISION	PH	PHASE
CU	COPPER	PHL	PANEL
dBA	UNIT OF SOUND LEVEL	PT	POTENTIAL TRANSFORMER
DPDT	DOUBLE POLE DOUBLE THROW	PTZ	PAN/TILT/ZOOM
DS	DISCONNECT SWITCH	QTY	QUANTITY
EA	EACH	R	REMOVE
EM	EMERGENCY	RCP	REFLECTED CEILING PLAN
EMT	ELECTRICAL METALLIC TUBING	RMC	RIGID METAL CONDUIT
ENT	ELECTRICAL NONMETALLIC TUBING	RNC	RIGID NONMETALLIC CONDUIT
EPO	EQUIPMENT	RPM	REVOLUTIONS PER MINUTE
EXIST	EXISTING	RR	REMOVE AND RELOCATE
F	FURNITURE MOUNTED	SCA	SHORT CIRCUIT AMPS
FA	FIRE ALARM	SCBA	STANDARD COLOR AS SELECTED BY ARCHITECT
FOP	FIRE ALARM CONTROL PANEL	SF	SQUARE FOOT (FEET)
FLA	FULL LOAD AMPS	SFBA	STANDARD FINISH AS SELECTED BY ARCHITECT
FMC	FLEXIBLE METALCONDUIT	SPDT	SINGLE POLE, DOUBLE THROW
FOB	FREIGHT ON BOARD	SPEC	SPECIFICATION
FVNR	FULL VOLTAGE REVERSING	SPST	SINGLE POLE, SINGLE THROW
FVR	FULL VOLTAGE REVERSING	S/S	START/STOP
G	GROUND	ST	SINGLE THROW
GEN	GENERATOR	SWBD	SWITCHBOARD
GFCI	GROUND FAULT CIRCUIT INTERRUPTER	SWGR	SWITCHGEAR
GFP	GROUND FAULT T PROTECTION	TL	TWIST LOCK
HD	HEAVY DUTY	TP	TELEPHONE POLE
HID	HIGH INTENSITY DISCHARGE	TP	TWISTED PAIR
HOA	HAND-OFF-AUTOMATIC HORSE POWER	TTB	TELEPHONE TERMINAL BOARD
HPF	HIGH POWER FACTOR	TV	TELEVISION
HPS	HIGH PRESSURE SODIUM	TVSS	TRANSIENT VOLTAGE SURGE SUPPRESSER
HV	HIGH VOLTAGE	TYP	TYPICAL
HZ	HERTZ	UP	UNDERGROUND
IG	ISOLATED GROUND	UGND	UNDERGROUND
IMC	INTERMEDIATE METAL CONDUIT	UPS	UNINTERRUPTIBLE POWER SUPPLY
IN/IS	INSULATED/ISOLATED	V	VOLTS
I/O	INPUT/OUTPUT	VA	VOLT AMPERE
IR	INFRARED	VFC	VARIABLE FREQUENCY CONTROLLER
J-BOX	JUNCTION BOX	W	WITH
		W/O	WITHOUT
		WP	WEATHERPROOF
		XFMR	TRANSFORMER

DEFINITIONS	
NOTE: ALL DEFINITIONS MAY NOT BE USED.	
INDICATED: THE TERM "INDICATED" REFERS TO GRAPHIC REPRESENTATIONS, NOTES, OR SCHEDULES ON THE DRAWINGS, OTHER PARAGRAPHS OR SCHEDULES IN THE SPECIFICATIONS, AND SIMILAR REQUIREMENTS IN THE CONTRACT DOCUMENTS. WHERE TERMS SUCH AS "SHOWN", "NOTED", "SCHEDULED", AND "SPECIFIED" ARE USED, IT IS TO HELP THE READER LOCATE THE REFERENCE, NO LIMITATION ON LOCATION IS INTENDED.	
DIRECTED: TERMS SUCH AS "DIRECTED", "REQUESTED", "AUTHORIZED", "SELECTED", "APPROVED", "REQUIRED" AND "PERMITTED" MEAN "DIRECTED BY THE ENGINEER", "REQUESTED BY THE ENGINEER", AND SIMILAR PHRASES.	
APPROVED: THE TERM "APPROVED", WHERE USED IN CONJUNCTION WITH THE ENGINEER'S ACTION ON THE CONTRACTOR'S SUBMITTALS, APPLICATIONS, AND REQUESTS, IS LIMITED TO THE ENGINEER'S DUTIES AND RESPONSIBILITIES AS STATED IN GENERAL AND SUPPLEMENTARY CONDITIONS.	
FURNISH: THE TERM "FURNISH" IS USED TO MEAN "SUPPLY AND DELIVER TO THE PROJECT SITE, READY FOR UNLOADING, UNPACKING, ASSEMBLY, INSTALLATION, AND SIMILAR OPERATIONS."	
INSTALL: THE TERM "INSTALL" IS USED TO DESCRIBE OPERATIONS AT PROJECT SITE INCLUDING THE ACTUAL "UNLOADING, UNPACKING, ASSEMBLY, ERECTION, PLACING, ANCHORING, APPLYING, WORKING TO DIMENSION, FINISHING, CURING, PROTECTING, CLEANING, AND SIMILAR OPERATIONS."	
PROVIDE: THE TERM "PROVIDE" MEANS "TO FURNISH AND INSTALL, COMPLETE AND READY FOR THE INTENDED USE."	
INSTALLER: AN "INSTALLER" IS THE CONTRACTOR OR AN ENTITY ENGAGED BY THE CONTRACTOR, EITHER AS AN EMPLOYEE, SUBCONTRACTOR, OR SUB-SUBCONTRACTOR, FOR PERFORMANCE OF A PARTICULAR CONSTRUCTION ACTIVITY, INCLUDING INSTALLATION, ERECTION, APPLICATION, AND SIMILAR OPERATIONS. INSTALLERS ARE REQUIRED TO BE EXPERIENCED IN THE OPERATIONS THEY ARE ENGAGED TO PERFORM.	
TECHNOLOGY SYSTEMS: THE TERM "TECHNOLOGY SYSTEMS" IS USED TO DESCRIBE ALL LOW VOLTAGE SYSTEMS GENERALLY REFERRED TO AS "SPECIAL SYSTEMS". THESE SYSTEMS INCLUDE BUT ARE NOT NECESSARILY LIMITED TO ALL SYSTEMS WHICH UTILIZE VOLTAGES OF LESS THAN 71 VOLTS SUCH AS SOUND SYSTEMS, VIDEO SYSTEMS, TV SYSTEMS, SECURITY SYSTEMS, VOICE AND DATA CABLING SYSTEMS, ETC...	

SITE COORDINATION	
THE LOCATION, CAPACITY, AND VOLTAGE OF THE LINES ARE ALL IN ACCORDANCE WITH DATA GIVEN THIS OFFICE BY THE UTILITY COMPANY. COORDINATE WITH THE LOCAL UTILITY COMPANY THE INSTALLATION OF THE ELECTRICAL SERVICE. COMPLY WITH UTILITY REGULATIONS. REPORT DISCREPANCIES TO THE ENGINEER.	
FACILITY ELECTRICIAN	
PERSON CONTACTED: ALVIN CROWN DFCM SOUTH COUNTY COMPLEX DATE: SALT LAKE CITY, UT 84119 PHONE NUMBER: (801)965-4750	
FACILITY PROJECT MANAGER	
PERSON CONTACTED: JIM RUSSELL DATE: PHONE NUMBER: (801)538-9784	
FACILITY MANAGER	
PERSON CONTACTED: STEPHEN SENDOBRY DFCM SOUTH COUNTY COMPLEX DATE: SALT LAKE CITY, UT 84119 PHONE NUMBER: (801)965-4350	

ELECTRICAL SHEET INDEX	
SHEET NO	SHEET TITLE
E-001	SYMBOL SCHEDULE, SHEET INDEX
E-101	SITE LIGHTING PLAN
E-101-LC	SITE LIGHTING ILLUMINANCE LEVEL PLAN
E-501	PARTIAL ONE LINE DIAGRAM, DETAILS
E-601	PANEL AND LIGHTING FIXTURE SCHEDULES

GENERAL ELECTRICAL NOTES	
1. CLARIFICATION METHODS: AT THE TIME OF BIDDING, BIDDERS SHALL FAMILIARIZE THEMSELVES WITH THE DRAWINGS AND SPECIFICATIONS. ANY QUESTIONS, MISUNDERSTANDINGS, CONFLICTS, DELETIONS, DISCONTINUED PRODUCTS, CATALOG NUMBER DISCREPANCIES, DISCREPANCIES BETWEEN THE EQUIPMENT SUPPLIED AND THE INTENT OR FUNCTION OF THE EQUIPMENT, ETC, SHALL BE SUBMITTED TO THE ARCHITECT/ENGINEER IN WRITING FOR CLARIFICATION PRIOR TO ISSUANCE OF THE FINAL ADDENDUM AND BIDDING OF THE PROJECT. WHERE DISCREPANCIES OR MULTIPLE INTERPRETATIONS OCCUR, THE MOST STRINGENT (WHICH IS GENERALLY RECOGNIZED AS THE MOST COSTLY) THAT MEETS THE INTENT OF THE DOCUMENTS SHALL BE ENFORCED.	
2. OWNER FURNISHED ITEMS: THE OWNER WILL FURNISH MATERIAL AND EQUIPMENT AS INDICATED IN THE CONTRACT DOCUMENTS TO BE INCORPORATED INTO THE WORK. THESE ITEMS ARE ASSIGNED TO THE INSTALLER AND COSTS FOR RECEIVING, HANDLING, STORAGE, IF REQUIRED, AND INSTALLATION ARE INCLUDED IN THE CONTRACT SUM.	
A. THE INSTALLER'S RESPONSIBILITIES ARE THE SAME AS IF THE INSTALLER FURNISHED THE MATERIALS OR EQUIPMENT.	
B. THE OWNER WILL ARRANGE AND PAY FOR DELIVERY OF OWNER FURNISHED ITEMS FREIGHT ON BOARD JOB SITE AND THE INSTALLER WILL INSPECT DELIVERIES FOR DAMAGE. IF OWNER FURNISHED ITEMS ARE DAMAGED, DEFECTIVE OR MISSING, DOCUMENT DAMAGED ITEMS WITH THE TRANSPORT COMPANY AND THE OWNER WILL ARRANGE FOR REPLACEMENT. THE OWNER WILL ALSO ARRANGE FOR MANUFACTURER'S FIELD SERVICES, AND THE DELIVERY OF MANUFACTURER'S WARRANTIES AND BONDS TO THE INSTALLER.	
C. THE INSTALLER IS RESPONSIBLE FOR DESIGNATING THE DELIVERY DATES OF OWNER FURNISHED ITEMS AND FOR RECEIVING, UNLOADING AND HANDLING OWNER FURNISHED ITEMS AT THE SITE. THE INSTALLER IS RESPONSIBLE FOR PROTECTING OWNER FURNISHED ITEMS FROM DAMAGE, INCLUDING DAMAGE FROM EXPOSURE TO THE ELEMENTS, AND TO REPAIR OR REPLACE ITEMS DAMAGED AS A RESULT OF HIS OPERATIONS.	
3. EXPOSED STRUCTURE AREAS (EXCLUDING MECHANICAL, ELECTRICAL, AND COMMUNICATION SPACES): INSTALL RACEWAYS BETWEEN DECK AND STRUCTURE WHEREVER POSSIBLE IN EXPOSED STRUCTURE CEILING AREAS. ROUTE RACEWAYS IN CONCEALED AREAS WHEREVER POSSIBLE. REFER ALL CONDITIONS WHERE RACEWAYS MUST BE INSTALLED WHICH CANNOT COMPLY WITH THESE REQUIREMENTS TO THE ARCHITECT.	
4. SUBMITTALS: PROVIDE SUBMITTALS IN THREE RING BINDERS WITH JOB NAME, SUBCONTRACTOR, AND VOLUME ON THE BINDING. PREPARE TABS FOR EACH SPECIFICATION SECTION REQUIRING SUBMITTALS. PREPARE INDEX OF EQUIPMENT SUBMITTED IN EACH TAB.	
5. REFLECTED CEILING PLANS: COORDINATE THE LOCATION OF LIGHT FIXTURES WITH THE ARCHITECTURAL REFLECTED CEILING PLANS. REFER ALL DISCREPANCIES TO THE ARCHITECT AND ENGINEER.	



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RAMPTON COMPLEX SITE LIGHTING
STATE PROPERTY NO:

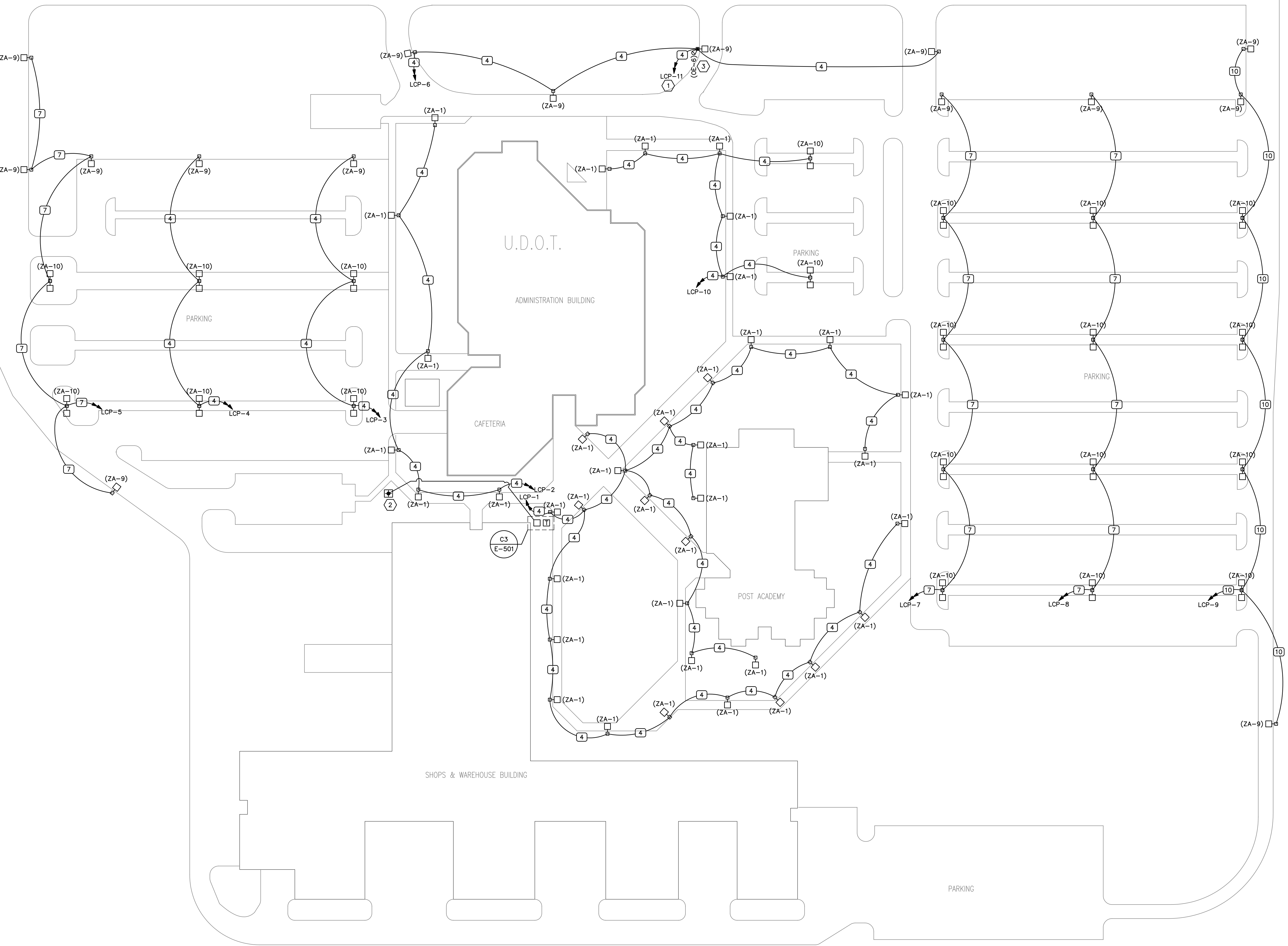
CONSTRUCTION DOCUMENTS

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MARK	DATE	DESCRIPTION
ISSUE: .		
DATE: OCTOBER 2006		
DFCM PROJECT NO: .		
PROJECT NO: 20060405		
DRAWN BY: WDA		
CHECKED BY: JMG		
DESIGNED BY: JMG		
RECORD DRAWING DATE: .		
SIGNATURE:		
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SHEET TITLE		
SYMBOL SCHEDULE, SHEET INDEX		
E-001		
SHEET OF		

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A1 SITE LIGHTING PLAN

SCALE: 1" = 50'-0"



GENERAL SHEET NOTES

1. ALL FIXTURES AND BASES ARE NOT REUSED. DEMOLITION CONCRETE BASE. REMOVE COPPER CONDUCTORS TO PANEL AND ABANDON CONDUIT IN PLACE AFTER WATERPROOFING.
2. RESTORE CONCRETE AND ASPHALT AFTER TRENCHING AND BACK FILL. MATCH EXISTING MATERIALS. CONTACT DAN CLARK @ 538-9514 FOR CONCRETE AND ASPHALT REQUIREMENTS.

SHEET KEYNOTES

1. PROVIDE SEPARATE CIRCUIT FOR FLAG POLE FLOOD LIGHT.
2. PROVIDE 1" PVC CONDUIT STUBBED TO THIS LOCATION FOR FUTURE PARKING LOT EXPANSION. PROVIDE HANDHOLE INSTALLED FLUSH WITH FINISH GRADE AT STUBB LOCATION.
3. POLE TO BE ENGINEERED TO SUPPORT ADDITIONAL WEIGHT OF FLOODLIGHT.



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**RAMPTON
COMPLEX
SITE LIGHTING**
STATE PROPERTY NO:

**CONSTRUCTION
DOCUMENTS**

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ISSUE:	DATE:	OCTOBER 2006
DCM PROJECT NO:	PROJECT NO:	20060405
DRAWN BY:	WDA	
CHECKED BY:	JMG	
DESIGNED BY:	JMG	
RECORD DRAWING DATE:		

SIGNATURE:
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SHEET TITLE
**SITE
LIGHTING
PLAN**

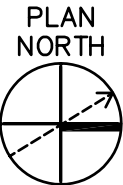
E-101

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A1 SITE LIGHTING ILLUMINANCE LEVEL PLAN

SCALE: 1" = 50'-0"



0 25' 50' 100'

2700 WEST

U.D.O.T.

ADMINISTRATION BUILDING

CAFETERIA

POST ACADEMY

SHOPS & WAREHOUSE BUILDING

PARKING

PARKING

NUMERIC SUMMARY				
LABEL	CALCTYPE	UNITS	AVG	MAX
		MIN	AVG/MIN	MAX/MIN
TYPICAL PARKING LOT	ILLUMINANCE	FC	2.21	7.9
TYPICAL WALKWAY	ILLUMINANCE	FC	2.4	7.1
		0.3	8	23.67

LUMINAIRE SCHEDULE					
SYMBOL	LABEL	QTY	ARRANGEMENT	LUMENS	LLF
		DESCRIPTION			
□	ZA-9 3	55	SINGLE	50000	0.64
		KAD 400S R3			
□	ZA-1	38	SINGLE	16000	0.64
		KSP1 150S R3			



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SITE LIGHTING**

STATE PROPERTY NO:

**CONSTRUCTION
DOCUMENTS**

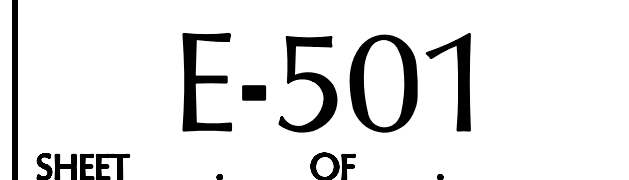
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MARK	DATE	DESCRIPTION
ISSUE:	OCTOBER 2006	
DATE:		
DCFM PROJECT NO:		
PROJECT NO:	20060405	
DRAWN BY:	WDA	
CHECKED BY:	JMG	
DESIGNED BY:	JMG	
RECORD DRAWING DATE		

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SHEET TITLE
**SITE
LIGHTING
ILLUMINANCE
LEVEL PLAN**

E-101-LC
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E

D

C

B

A

LIGHTING CONTROL PANEL SCHEDULE									
LCP									
								DATE: 10/30/2006	
RELAY	CIRCUIT	VOLTS	LOAD CONTROLLED	AUTOMATIC CONTROL		OVERRIDE CONTROL		WATTS	REMARKS
				ON	OFF	SCHEDULE	ON	OFF	
1	PL-1,3	480	CENTRAL COURTYARD	PC	PC		BMS	BMS	4100
2	PL-5,7	480	SOUTH PARKING LOT BLDG SIDE	PC	PC		BMS	BMS	1200
3	PL-9,11	480	SOUTH PARKING LOT	PC	PC		BMS	BMS	2350
4	PL-13,15	480	SOUTH PARKING LOT	PC	PC		BMS	BMS	2350
5	PL-2,4	480	SOUTH PARKING LOT	PC	PC		BMS	BMS	3760
6	PL-6,8	480	ENTRY	PC	PC		BMS	BMS	1880
7	PL-10,12	480	NORTH PARKING LOT	PC	PC		BMS	BMS	4230
8	PL-14,16	480	NORTH PARKING LOT	PC	PC		BMS	BMS	4230
9	PL-17,19	480	NORTH PARKING LOT	PC	PC		BMS	BMS	5170
10	PL-18,20	480	NORTH PARKING LOT	PC	PC		BMS	BMS	2880
11	PL-21,23	480	ENTRY FLAG	PC	PC		BMS	BMS	250
12			SPARE						
13			SPARE						
14			SPARE						
15			SPARE						
16			SPARE						
BH = BUSINESS HOURS PER SCHEDULE (Example Schedule 1: on at 6:00 AM / Off at 8:00 PM) - Up to 6 schedules available as selected by owner									
PC = PHOTO CELL									
PHONE OVERRIDE (Building tenants can turn lights on via a dial-in on their phone, auto off after 2 hours)									
BMS = BUILDING MANAGEMENT SYSTEM (Manual control by operator through the BMS)									

PANEL "PL"																			
VOLTS/PHASE/WIRE: 277/480 V, 3 PH 4 WIRE					PANEL SIZE & TYPE: 22" W x 6" D, BOLT-ON					MAIN SIZE & TYPE: 125 AMPERE MAIN BKR					LOCATION: CONTROL CABINET				
ACCESSORIES:					PANEL DIRECTORY, IDENTIFICATION, GROUNDING BAR, INSULATED GROUND BAR, SUBFEED LUGS					CABINET: SURFACE					NOTES: 1				
CKT NO	OCF	LOAD (kVA)	DESCRIPTION	LCL	PHASE	LOAD	LCL	DESCRIPTION	LOAD (kVA)	OCF	CKT NO	AMP	POLE	LG	CO	PWR	AMP	POLE	LG
1	20	2	2.1				2.6	3.9	2.4		2	1.9					20	2	2
3	-	-	2.1				2.6	3.9	2.4		4	-					-	-	4
5	20	2	0.6				0.8		1.5	1.2	6	0.9					20	2	6
7	-	-	0.6				0.8	1.5	1.2		8	-					-	-	8
9	20	2	1.2				1.5	3.3	2.6		10	2.1					20	2	10
11	-	-	1.2				1.5		3.3	2.6	12	-					-	-	12
13	20	2	1.2				1.5	3.3	2.6		14	2.1					20	2	14
15	-	-	1.2				1.5		3.3	2.6	16	-					-	-	16
17	20	2	2.6				3.2		4.0	1.8	18	1.4					20	2	18
19	-	-	2.6				3.2	4.0	1.8		20	-					-	-	20
21	20	2	0.1				0.2		0.1	0.0	22	0.0					20	1	22
23	-	-	0.1				0.2		0.1	0.0	24	0.0					20	1	24
25	20	1					0.0	0.0		0.0	26	0.0					20	1	26
27	20	1					0.0		0.0	0.0	28	0.0					20	1	28
29	20	1					0.0		0.0	0.0	30	0.0					20	1	30
31	20	1					0.0	0.0		0.0	32	0.0					20	1	32
33	20	1					0.0		0.0	0.0	34	0.0					20	1	34
35	20	1					0.0		0.0	0.0	36	0.0					20	1	36
37	20	1					0.0	0.0		0.0	38	0.0					20	1	38
39	20	1					0.0		0.0	0.0	40	0.0					20	1	40
41	20	1					0.0		0.0	0.0	42	0.0					20	1	42
TOTALS:										CONNECTED KVA PER PHASE 13 11 9					CONNECTED TOTAL KVA 32				
										CONNECTED AMPS PER PHASE 46 38 32					CONNECTED AVERAGE AMPS PER PHASE 39				
NEC DIVERSIFIED LOAD CALCULATIONS										LIGHTING 32kVA @125% = 41 kVA					ALL OTHER LOADS @100% = 0 kVA				
										RECEPTACLES 0kVA @100% = 0 kVA					25% OF LARGEST MOTOR = 0 kVA				
										REMAINDER 0kVA @ 50% = 0 kVA					DIVERSIFIED TOTAL KVA = 41				
															AVERAGE AMPS PER PHASE = 49				

NOTES LEGEND:
1. MOUNT IN CONTROL CABINET WITH LIGHTING CONTROL PANEL.

LIGHTING FIXTURE SCHEDULE						RAMPTON COMPLEX SITE LIGHTING	
NOTE TO BIDDERS: COMPLY WITH SECTIONS 16511, 16521, AND 16570 OF THE SPECIFICATIONS. REFER TO SPECIFICATIONS FOR IMPORTANT TECHNICAL REQUIREMENTS FOR LIGHTING FIXTURES, BALLASTS, AND LAMPS. THE CATALOG NUMBERS LISTED BELOW HAVE BEEN CAREFULLY PREPARED TO ASSIST BIDDERS IN SELECTING PRODUCTS TO ACHIEVE THE DESIGN CONCEPT, HOWEVER, PRIOR TO BIDDING, EACH MANUFACTURER SHALL COMPARE THE CATALOG NUMBERS SHOWN WITH THE DESCRIPTION AND REQUIREMENTS ON THE DRAWINGS, AND SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY DISCREPANCIES. SPECIFICALLY INCLUDED IN THIS EVALUATION SHALL BE THE VERIFYING OF PROPER MOUNTING KITS OR ACCESSORIES TO FACILITATE INSTALLATION AS SHOWN AT EACH LOCATION ON THE DRAWINGS. NO ALLOWANCE OR REDRESS WILL BE ALLOWED FOR DISCREPANCIES THAT WERE NOT REPORTED TO THE ARCHITECT/ENGINEER IN TIME FOR CORRECTION OR CLARIFICATION BEFORE THE BID. THE REPORTING OF ANY AMBIGUITY IS THE RESPONSIBILITY OF THE BIDDER. PROVIDE UNIT PRICES AND FIXTURE BRAND SELECTED FOR ADD/DELETE CHANGES FOR EACH FIXTURE TYPES SHOWN WITHIN 48 BUSINESS HOURS OF THE BID DATE. FAILURE TO COMPLY WITH THIS REQUIREMENT MAY DISQUALIFY THE PRODUCTS AND EMPOWER THE ENGINEER TO DETERMINE FAIR VALUE FOR FIXTURE AND INSTALLATION CHANGES, WITHOUT FURTHER INPUT FROM THE CONTRACTOR OR INSTALLER. SUBMITTAL PACKAGE SHALL INCLUDE LAMP MANUFACTURER AND CATALOG NUMBER ON EACH FIXTURE SHEET. ON ALL PENDANT MOUNTED FIXTURES, PROVIDE A SECOND SET OF PENDANTS, OF A DIFFERENT LENGTH, AS DIRECTED BY THE ARCHITECT/ENGINEER, PROVIDED AND INSTALLED AT NO ADDITIONAL CHARGE. ALL FIXTURES SHALL BE APPROVED BY UL OR ANOTHER ACCEPTABLE TESTING LAB FOR THE PURPOSE INTENDED AND WITH THE LAMP AND BALLAST PROPOSED. CONTRACTOR ALLOWANCE PRICES ARE ACCURATE WHEN THIS JOB WAS SPECIFIED, CONTRACTOR AND ELECTRICAL DISTRIBUTOR SHALL VERIFY THIS ALLOWANCE AND REPORT ANY PROBLEMS TO THE ENGINEER BEFORE THE BID. ALLOWANCE PRICE MAY OR MAY NOT INCLUDE LAMP(S) OR FREIGHT AS NOTED, AND DO NOT INCLUDE ANY TAXES. UNIVERSAL VOLTAGE (120/277) BALLASTS REQUIRED UNLESS NOTED OTHERWISE.							
SYMBOL	MARK	FIXTURE CHARACTERISTICS BODY / AIR / MOUNTING / DOOR LENS/LOUVER/REFLECTOR/OTHER	LAMP	WATTS	VOLTS	MANUFACTURER CATALOG NUMBER	NOTES
OE		OUTDOOR FLOOD LIGHTS; FULLY GASKETED; WET LABEL: TYPES AND WATTAGES AS INDICATED. ON ELEVATIONS, COLOR PER ARCHITECT; VANDAL RESISTANT CONSTRUCTION. SECURE MOUNTING BRACKET AS REQUIRED, AIMING ADJUSTMENT WITH FIRM LOCKING DEVICE. MULTI-TAP BALLAST. FIXTURES SELECTED FOR APPEARANCE AS WELL AS PERFORMANCE. VISUAL SUBMITTAL REQUIRED FOR APPROVAL.					
OE-6		200PSMH, FLOODLIGHT, MEDIUM BEAM SPREAD.	200PSMH	250W	MTBV	KIM GREENLEE GARDCO WIDELITE LSI LITHONIA GE	AFL23/200MHPMT/XX SLM200MH-MT-MF-SCBA-PULSE START DF7-W-HSP-200PSMH-MT-XX-CBA EFIP-200-CO-QV-MA2-XX DRM-MF-200PSMH-F-MT-CBA-NO KFL3 200M RM TB XX SCWA CFSX20POH1MXXXXX
ZA		LIGHT POLES: TOTALLY ENCLOSED RAINIGHT, DUST-TIGHT AND CORROSION RESISTANT; POLE AS SHOWN IN DETAIL WITH HANDHOLE, COVER, BOLT COVER, AND BASE; PAINTED (COLOR TO BE SELECTED BY ARCHITECT / ENGINEER WHICH MAY DIFFER FROM CATALOG NUMBER SHOWN). MTB= 120,208,240,277 VOLT MULTI-TAP BALLAST. ALL BALLASTS HPF. ARM MOUNT. HORIZONTAL LAMP.					
ZA-1		SHOEBOX STYLE, CUTOFF LUMINAIRE SINGLE HEAD, MULTI-TAP BALLAST; TYPE III DISTRIBUTION. 150HPS	150HPS	200W	MTB	EMCO MCGRAW HUBBELL SPALDING LITHONIA WIDELITE EXCELINE	ECA-141-3H-150HPS-MT-CBA CAL-150-HPS-MT-3F RCS-A150S-3P8-1 SEI-S150-TYPE 3-MT-ARM-DBZ KAD 150S R3 TB SPD09 S10S-150-3-QV-X SMR153LX-B
ZA-9		SHOEBOX STYLE, CUTOFF LUMINAIRE SINGLE HEAD, MULTI-TAP BALLAST; TYPE III DISTRIBUTION. 400HPS	400HPS	470W	MTB	EMCO MCGRAW HUBBELL SPALDING LITHONIA WIDELITE EXCELINE	ECA-181-3H-400HPS-MT-CBA CAL-400-HPS-MT-3F RCS-A400S-3P8-1 SEII-S400-TYPE 3-MT-ARM-DBZ KAD 400S R3 TB SPD09 S10S-400-3-QV-X SMR40LX-B
ZA-10		SHOEBOX STYLE, CUTOFF LUMINAIRE DUAL HEAD, MULTI-TAP BALLAST; TYPE III DISTRIBUTION. 400HPS	2-400HPS	940W	MTB	EMCO MCGRAW HUBBELL SPALDING LITHONIA WIDELITE EXCELINE	ECA-181-3H-400HPS-MT-CBA CAL-400-HPS-MT-3F RCS-A400S-3P8-1 SEII-S400-TYPE 3-MT-ARM-DBZ KAD 400S R3 TB SPD09 S10S-400-3-QV-X SMR40LX-B



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CONSTRUCTION DOCUMENTS

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PROJECT NO:	20060405	
DRAWN BY: WDA		
CHECKED BY:	JMG	
DESIGNED BY:	JMG	
RECORD DRAWING DATE:		
SIGNATURE:		
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PANEL AND
LIGHTING
FIXTURE
SCHEDULES

E-601

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